



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/387,938	09/01/1999	EDWIN E. KLINGMAN	54208-35C1	3189

25696 7590 06/16/2003

OPPENHEIMER WOLFF & DONNELLY
P. O. BOX 10356
PALO ALTO, CA 94303

EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
----------	--------------

2666

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/387,938

Applicant(s)

KLINGMAN, EDWIN E.

Examiner

Ronald Abelson

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20, 22-25, 29, and 31-34 is/are rejected.
- 7) ☒ Claim(s) 7, 21 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2666

Claim Rejections - 35 USC § 103

1. Claims 1-6, 8-20, 22-25, 29, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh (US 6,046,762) in view of Reksten (6,396,909).

Regarding claims 1, 29, and 31, Sonesh teaches a method and apparatus for a data processing system for managing incoming calls having a plurality of departments (group of agents selected based upon area of interest, col. 7 lines 23-25) and a plurality of agents (fig. 1 see agent telephones and workstations).

The method comprises receiving one or more incoming calls by a call manager object (fig. 1: ACD-minicomputer),

The method comprises creating an associated call object in response to receiving the incoming call (name, password, service, interest, col. 7 lines 21-23).

The method comprises playing a voice menu describing a plurality of selection items in a department table corresponding to a department in the organization, each call object including the department table with which the call is currently associated (col. 5 lines 34 - 39). The examiner maintains the "department table" of Sonesh is accessed by the user selecting desired criteria (service and/or area of interest, col. 7 lines 22-23).

Art Unit: 2666

The method comprises receiving one or more input signals (col. 7 lines 21-23).

The method comprises managing the incoming call (col. 7 lines 23-25).

Sonesh is silent on a plurality of call manager objects with a call manager object being present in each of the plurality of computing nodes.

Reksten teaches a plurality of call manager objects with a call manager object being present in each of the plurality of computing nodes (fig. 2 box 14a-c).

Therefore it would have been obvious to one of ordinary skill in the art, having both Sonesh and Reksten before him/her and with the teachings [a] as shown by Sonesh, a method and apparatus for a data processing system for managing incoming calls having a plurality of departments and a plurality of agents, and [b] as shown by Reksten, a plurality of call manager objects with a call manager object being present in each of the plurality of computing nodes, to be motivated to modify the system of Sonesh by augmenting the system by installing a plurality of ACD-Minicomputers connected in parallel to the PSTN (fig. 1 box 111) and Internet (fig. 1 box 113). This could be accomplished by installing a load-balancing device between the PSTN and ACD-Minicomputers to select the appropriate ACD-

Art Unit: 2666

Minicomputer. This would improve the system by providing the system the ability to provide adequate service when the number of incoming calls exceeds a single ACD-Minicomputer capability.

Regarding claim 31, in addition to the limitations listed in claim 1, a plurality of call manager object methods (Sonesh: DTMF, voice recognition, col. 5 lines 51-59).

Regarding the limitation embedding the table into the call object to transfer the call, the examiner maintains this process is performed before transferring the caller's data to the LAN (Sonesh: col. 7 lines 26-27).

Regarding claim 2, listening for an incoming call and connecting to the incoming call (Sonesh: fig. 1 ACD-minicomputer).

Regarding claim 3, receiving a selection event from the caller and determining from the selection event what was selected (Sonesh: agents are selected based on the caller identification and service and/or area of interest, col. 7 lines 23 - 25).

Art Unit: 2666

Regarding claim 4, the selection event is a DTMF tone produced by the caller (Sonesh: col. 5 lines 55 - 59).

Regarding claim 5, the selection event is voice input (Sonesh: voice recognition, col. 5 lines 58 - 59).

Regarding claim 6, the table contains alternate routing information (Sonesh: agents or groups of agents, col. 7 lines 23 - 25).

The method includes determining if an agent is available (Sonesh: col. 7 lines 25 - 27).

The method includes if an agent is available, obtaining the agents number, transferring the call and disconnecting (Sonesh: col. 7 lines 25 - 28). Regarding disconnecting, a virtual link (Sonesh: col. 7 lines 27-28 only exists for the line of the call).

The method includes handling the call according to alternate routing information (Sonesh: agents or groups of agents, col. 7 lines 23 - 25). Note, more than one agent can be available to handle the call.

Regarding claim 8, all agents have access to the database (Sonesh: col. 6 lines 48 - 51).

Art Unit: 2666

Regarding claim 9, 24, and 25, in addition to the limitations listed in claims 1 and 26, Sonesh teaches an ISDN interface (Sonesh: col. 5 lines 13 - 32).

Regarding claim 10, the examiner takes official notice that it is common practice to operate on the D-channel of ISDN with the X.25 protocol.

Regarding claim 11, information communicated includes agent status and queries not visible to the caller (Sonesh: agent station has access to external communication services, col. 2 lines 40 - 61).

Regarding claim 12, agents can communicate to each other via the Internet (Sonesh: fig. 1 box 125, 113, and 120).

Regarding claim 13, the incoming call has caller ID information associated with it (Sonesh: col. 7 lines 18-19), transferring the incoming call based on the caller ID (Sonesh: col. 7 lines 23-24), and disconnecting from the call (Sonesh: col. 7 lines 27-28). Regarding disconnecting, a virtual link only exists for the length of the call.

Art Unit: 2666

Regarding claims 14-19 and 32-34, although not explicitly stated in Sonesh it is well known in the art that Java, XML, and JDBC are well known in the field of computer programming.

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to program the call center using Java, XML, and JDBC since they are proven, reliable programming languages.

Regarding claim 20, the call center responds to user inputs (Sonesh: col. 7 lines 22 - 25). Regarding the limitation of rows and columns for the table, this is an implementation issue that is not patentable.

Regarding claim 22, each call object is managed by the call manager object (Sonesh: fig. 1: ACD-minicomputer, caller's data, col. 7 col. 7 lines 25-27).

Regarding claim 23, the call manager object can invoke different call objects (Sonesh: voice menu, col. 5 lines 28-31).

Art Unit: 2666

Response to Arguments

2. Applicant's arguments with respect to amended independent claims 1, 29, and 31 have been considered but are moot in view of the new ground(s) of rejection. The examiner agrees with the applicant all the limitations listed in the amended independent claims were not addressed in the prior office action (applicant: pg. 10 lines 18-19). Therefore, a new search was performed.

Regarding the applicant's contention that the MMACD is not teach "receiving one or more incoming calls by a call manager object, a call manager object being present in each of the plurality of computing nodes" (applicant: pg. 10 lines 23-24). The limitation "a call manager object being present in each of the plurality of computing nodes" has been added to the original claim. The examiner maintains that this added limitation has been addressed in this office action.

The examiner agrees with the applicant that the MMACD server is not an object in the sense used in the Applicant's invention (applicant: pg. 10 lines 28-29). The examiner has clarified this issue in the current office action. As previously addressed, the call object of Sonesh is (name, password, service, interest, col. 7 lines 21-23).

Art Unit: 2666

Regarding the applicant's argument the private data structures and methods (applicant: pg. 10 line 29), these terms are not defined in the specification.

Regarding the limitations, "each call object including the department table which the call is currently associated...managing the incoming call according to a call-management policy based on the information contained in the table and the input signals from the caller to attempt to reach one of the plurality of agents of the organization" (applicant: pg. 10 last line - pg. 11 line 4). As stated above, Sonesh teaches the identical process of selecting an agent based upon the user's input. As stated previously, the examiner maintains the "department table" of Sonesh is accessed by the user selecting desired criteria (service and/or area of interest, col. 7 lines 22-23).

Regarding the applicant's contention, Sonesh does not have a call object nor table (pg. 11 lines 4 - 12), these issues have been previously addressed.

Regarding claims 29 and 31 (applicant: pg. 11 second paragraph), no new limitations have been added from claim 1.

Regarding claims 26, 30, 28, 21, 7, and 27, the examiner agrees with the applicant that not all of the limitations have been met.

Art Unit: 2666

Regarding claim 6, (applicant: pg. 12 lines 3 - 9), the examiner maintains the limitations of claim 1 have been met. Secondly Sonesh does teach alternative routing information. As stated previously, Sonesh teaches agents or groups of agents (col. 7 lines 23 - 25).

Regarding claims 13 and 9, (applicant: pg. 12 lines 13 - 18), the examiner maintains the limitations of claim 1 have been met.

Regarding claim 24 and 25, (applicant: pg. 12 lines 19 - 30), the examiner maintains the limitations of claim 1 have been met. Secondly, Sonesh does teach an ISDN interface (Sonesh: col. 5 lines 13 - 32).

Regarding claim 28, the applicant has modified the claim to state, "Sonesh does not teach the presence of a call manager object in each computer processing node" (applicant: pg. 13 1st paragraph). This limitation has previously been discussed.

Regarding claim 2, (applicant: pg. 13 2nd paragraph), the examiner maintains the limitations of claim 1 have been met.

Regarding claim 3, (applicant: pg. 13 3rd paragraph), the examiner maintains the limitations of claim 1 have been met. Secondly, the issue of a call object has been previously addressed.

Art Unit: 2666

Regarding claims 4 and 5, (applicant: pg. 13 4th and 5th paragraphs), the examiner maintains the limitations of claims 1 and 3 have been met.

Regarding claim 8, (applicant: pg. 13 6th paragraph), the examiner maintains the limitations of claim 1 have been met.

Regarding claims 10 and 11, (applicant: pg. 13 7th and 8th paragraphs), the examiner maintains the limitations of claims 9 and 10 have been met. Additionally regarding claim 11, the examiner maintains Sonesh does teach "the information communicated includes agent status and queries not visible to the caller". As previously stated, Sonesh teaches the agent station has access to external communication services (col. 2 lines 40 - 61).

Regarding claim 12, (applicant: pg. 14 2nd paragraph), the examiner maintains the limitations of claim 8 have been met.

Regarding claim 20, (applicant: pg. 14 3rd paragraph), the examiner maintains the limitations of claim 1 have been met. Secondly, as previously discussed, Sonesh does teach a call object and department table. The specific implementation of the table, rows and columns, is not patentable.

Regarding claim 22, (applicant: pg. 14 4th paragraph), the examiner maintains the limitations of claim 1 have been met.

Art Unit: 2666

Secondly, as previously discussed, Sonesh does teach a call object.

Regarding claim 23 (applicant: pg. 14 4th paragraph), the call manager object can invoke different call objects (Sonesh: voice menu, col. 5 lines 28-31).

Allowable Subject Matter

3. Claims 26 - 28 are allowed.

4. Claim 7, 21, and 30 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter.

Regarding claims 21 and 30, nothing in the prior art of the record teaches or fairly suggests the table containing the availability of the agent, in combination with the other limitations listed in the claim.

Regarding claim 26, nothing in the prior art of the record teaches or fairly suggests the sequential steps of if an agent is not available and if another department is available, obtaining another department from the organization database and

Art Unit: 2666

then playing to the caller a voice menu, in combination with the other limitations listed in the claim.

Regarding claim 28, nothing in the prior art of the record teaches or fairly suggests an ISDN interface adapter connected to multiple ISDN B-channels, in combination with the other limitations listed in the claim.

Regarding claim 7, although Sonesh teaches determining whether or not the voice mailbox is available, nothing in the prior art of the record teaches or fairly suggests determining if an operator is available and if the operator is not available, recording a message in a default mailbox, in combination with the other limitations listed in the claim.
(col. 7 lines 43-46).

Conclusion

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

Art Unit: 2666

expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.



Ronald Abelson
Examiner
Art Unit 2666

June 9, 2003



DANG TON
PRIMARY EXAMINER